

REMARKS

The Office action mailed 13 November 2006, has been received and its contents carefully noted. Claims 20-22 and 26 were objected to and claims 10, 11, 16-19 and 31 were rejected. By this amendment, claims 10, 17 and 18 have been amended. Support may be found in the specification and the claims as originally filed. No statutory new matter has been added. Therefore, reconsideration and entry of the claims as amended are respectfully requested.

Claim Objections

The Examiner objected to claims 20-22 and 26 for being dependent on a rejected base claim.

Applicants respectfully submit that the amendment to the claims obviates this objection. Therefore, the claim objections should properly be withdrawn.

Rejection under 35 U.S.C. 112, second paragraph

The Examiner rejected claim 19 under 35 U.S.C. 112, second paragraph, as being indefinite for being unclear as to how a host cell can express the polypeptide after it has been killed.

Applicants have amended claim 19 to clarify that the host cell is killed *after* it has expressed the polypeptide. Although the specification does not provide *ipsis verbis* support, adequate support for this limitation is inherent by the teachings of the specification. Specifically, those skilled in the art would assume and understand that the host cell is killed *after* it has expressed the polypeptide.

Applicants respectfully assert that the claims, as amended, are clear and definite and the rejection under 35 U.S.C. 112, second paragraph, should properly be withdrawn.

Rejection under 35 U.S.C. 103(a)

The Examiner rejected claims 10, 11, 25 and 31 under 35 U.S.C. 103(a) as being unpatentable over Wolf et al., Accession #P53509.

Applicants respectfully submit that the claims, as amended, render this rejection moot. Therefore, the rejection of claims 10, 11, 25 and 31 under 35 U.S.C. 103(a) should properly be

withdrawn.

Rejection under 35 U.S.C. 102(b)/103(a)

The Examiner rejected claims 10, 11, 16, 17, 18, 19, 25 and 31 under 35 U.S.C. 102(b) as being anticipated by Wolf et al. (1989) or, in the alternative, under 35 U.S.C. 103(a). The Examiner indicates that although Wolf et al. does not disclose the sequence of a band of protein in a gel which was excised out and used to generate antisera, Wolf et al. inherently anticipates the claimed invention or renders the claimed invention obvious. Specifically, the Examiner points to the 16 kDa band in Figure 3 and related discussion in Wolf et al. for asserting that the protein in the 16 kDa band is a purified peptide inherently having SEQ ID NO:9.

Applicants respectfully submit CS6 comprises four (4) subunits, C_{ss}A, C_{ss}B, C_{ss}C and C_{ss}D. As taught in the instant Specification on page 23, these four subunits have different molecular weights. Specifically, C_{ss}A and C_{ss}B have a molecular weight of 15,058 and 15,877 daltons, respectfully. Nowhere does Wolf et al. teach or suggest which of the 4 subunits is the antigenic epitope at issue or even that CS6 has 4 subunits. SEQ ID NO:9 as claimed and provided in the instant Specification is the subunit C_{ss}A. As it is unknown whether the protein at the 16 kDa band in Figure 3 is C_{ss}A, C_{ss}B, or both, Wolf et al. is a nonenabling reference.

Further, it should be noted that the claims are limited to a *purified* polypeptide having SEQ ID NO:9 (C_{ss}A). Since it is unknown whether the protein at the 16 kDa band in Figure 3 of Wolf et al. is C_{ss}A, C_{ss}B, or both, Wolf et al. does not suggest the claimed invention as a whole – *purified* C_{ss}A. In fact, since Wolf et al. does not teach or suggest that CS6 is a 4 subunit protein, one skilled in the art would not be motivated to purify C_{ss}A from C_{ss}B.

Therefore, the claimed invention is novel and unobvious and the rejection under 35 U.S.C. 102(b)/103(a) should properly be withdrawn.

Request for Interview

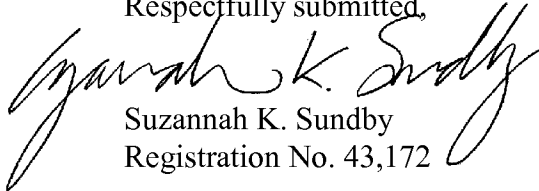
Either a telephonic or an in-person interview is respectfully requested should there be any remaining issues.

CONCLUSION

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Therefore, it is respectfully requested that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. 1.136(a), and any fees required therefor are hereby authorized to be charged to **Deposit Account No. 210-380**, Attorney Docket No. **034047.033CON4 (WRAIR 95-01D)**.

Respectfully submitted,



Suzannah K. Sundby
Registration No. 43,172

Date: 11 January 2007

SMITH, GAMBRELL & RUSSELL, LLP
1850 M Street, N.W., Suite 800
Washington, D.C. 20036
Telephone: (202) 263-4332
Fax: (202) 263-4352
ssundby@sgrlaw.com